

comprehensive picture of its present distribution, but a very vague one as regards numbers.

The accompanying sketch shows the areas where this species undoubtedly still exists.

As regards the three actually seen :—

No. 1 was seen in January 1944 about 70 yards away in a sandy wallow in a rocky gorge. On getting wind of the party it dashed into thick cover, and from the noise apparently made straight up the hill side.

No. 2 was seen in the early morning in April 1944, standing near a stream 100 yards away. When the officer crawled up nearer to observe it he heard it make off, and never got a second sight of it.

No. 3 was surprised on a game path on the spine of a bamboo covered ridge. It wheeled round and made straight back up the path. This was in March 1945.

All these were seen by different officers, and all the officers were quite definite that the animal only had one horn. I do not accept this as indicating *sondaicus*, as this species is probably extinct in Arakan and does not haunt the hill crests like *sumatrensis*. The posterior horn is not likely to have been noticed by untrained observers.

MAIN HEADQUARTERS

15 INDIAN CORPS,

11 A.B.P.O.

24th July 1945.

PHILIP CHRISTISON,

Lieut.-General.

9.—THE TAMIL NAME OF THE INDIAN PANGOLIN (*MANIS CRASSICAUDATA*).

On page 233, vol. 45, Miscellaneous Notes—6 of the *Journal* of the Society, Mr. R. W. Stoney refers to the Tamil name of *Manis crassicaudata* as 'Arrunkku'. The name by which the animal is very commonly known in the Tamil Districts of Trichinopoly, Tanjore and Madura, is 'Alungu'. In other places it is called Kalundu 'Kadhundu'.

Udumbu, as he rightly says, is the Tamil name for the Monitor Lizard—*Varanus* sp.

STATE MUSEUM,
PUDUKKOTTAI (S. INDIA).
3rd July 1945.

K. R. SRINIVASAN, M.A.,
Curator.

10.—NOTE ON THE INDIAN PANGOLIN (*MANIS CRASSICAUDATA*).

(With a plate).

I obtained a male Pangolin on 6-7-45. It had been seen two or three days previously floating in the floodstream of the Mutha River at Poona. It rapidly became very tame; it appeared also

to become accustomed to being taken out in daylight. My observations of its behaviour conform with the account given in Sterndale's 'Mammalia of India'. In addition however observations were made on its mode of digging. When put in an opened termite nest it would set to work unembarrassed by spectators.

First it would sniff around, moving its snout rapidly from place to place and making an occasional tentative scratch with a forelimb. When it had selected a spot it would begin to dig making a few scratches with each forefoot alternatively. The rapid sniffing continued all the time, as the hole began to appear. As it progressed it would sometimes change direction, the animal appearing to be guided by smell. If it started working sideways or upwards it would turn over onto its side or back as the case might be, and continue to dig in these positions.

Photograph No. 1. shows it working on its side. The hind legs were then frequently applied to the walls or roof of the hole to obtain a better purchase. When the hole was well advanced it would periodically back out to eject the excavated earth. The actual ejection from the mouth of the hole was performed in two movements. First the hind legs were planted firmly astride and by a rapid movement of the whole of the forepart of the body (as when curling up) the earth was shot between the hindlimbs. This is shown in photograph No. 2. the part of the body in rapid motion at the moment of exposure ($1/50$ sec.) can be seen to be blurred. The downward curve of the tail was caused by the fact that tip caught the ground as it moved backwards. Secondly the forelimbs are planted on the ground and a vigorous backward thrust is made with the hindlimbs together. The animal then returns down the hole until the next load is ready to be shifted.

When it struck one of the combs¹ in the nest, the digging would cease whilst the ants are eaten. There were however many ants still in the remains of the comb when ejected.

For about six weeks it was fed on white ant combs and condensed milk. In its box it would start on the combs as soon as it smelt them, and sniffing continually, turn over the bits of comb with rapid strokes of its tongue. The worrying action of the tongue crumbled up the comb. I was puzzled by the fact that it did not appear to pick up any of the actual comb, on its sticky tongue. It would sometimes lick my hands if I had been handling combs, the tongue did not feel sticky.

On this white ant diet, its faeces were a bright straw yellow, and the consistency of half set jelly, they were squirted out in one action, they always appeared to contain some membrane.

With a view to accustoming it to a change of diet in preparation for a journey, the white ants were stopped, and it was fed on milk alone for ten days, and then on milk and custard.

Four days after this it died (31-8-45). The cause of death was not known; there was a fair amount of fat in the tissues

¹ Fungus gardens.—Eds.



1. The Indian Pangolin.



Photos by

G. UNDERWOOD.

2. The Indian Pangolin.